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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/735,161 | 12/12/2000 | Randy B. Thomas | P01944US1 | 4680 |

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EXAMINER

TOOMER, CEPHIA D

ART UNIT

PAPER NUMBER

1714

DATE MAILED: 07/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/735,161

Applicant(s)

THOMAS ET AL.

Examiner

Cephia D. Toomer

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-36 and 51-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 51-54 is/are allowed.
- 6) ☒ Claim(s) 1-12, 14-30, 32-36 and 55 is/are rejected.
- 7) ☒ Claim(s) 13 and 31 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 10.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This Office action is in response to the amendment filed April 23, 2003 in which claims 1, 7, 24 and 25 were amended and claims 37-50 were cancelled.

1. The rejection of the claims under 35 U.S.C. 112, second paragraph, is withdrawn in view of the amendment to the claims and Applicant's arguments.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3-6, 10-12, 14, 16-19, 21-24, 28-30, and 34-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Kittle (US 4,561,905).

Kittle teaches a method of suppressing coal dust by use of an emulsion composition comprising oil, water and a surfactant (see abstract; col. 2, lines 1-6). The emulsion is diluted and foamed. The foam is sprayed into a falling mass of coal (see col. 2, lines 6-8). The oil may be asphalt-cut back and the surfactant is preferably anionic (see col. 2, lines 28-33; col. 3, lines 21-24).

A gas, usually air, is introduced into the emulsion and the emulsion is forced through a restricted passage at a high pressure. Kittle teaches that the gas is injected into the emulsion downstream of the restricted passage (see col. 3, lines 38-50). The emulsion contains 15-70% oil, 4-35% surfactant and 18-81% water (see col. 4, lines 8-

14). Since Kittle teaches the same composition, his composition would inherently have a pH 7 or more.

Accordingly, Kittle teaching all the limitations of the claims anticipates the claim.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 7-9, 15, 25-27, 32, and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kittle (US 4,561,905).

Kittle has been discussed above. Kittle teaches the limitations of the claims other than the differences that are discussed below.

In the first aspect, Kittle differs from the claims in that he does not specifically teach that the water and soap (surfactant) are combined before addition with the asphalt (claims 7 and 25). However, it is well settled that changes in the sequence of adding ingredients is prima facie obvious. See MPEP 2144.04 IV C.

In the second aspect, Kittle differs from the claims in that he does not specifically teach that the spray is a flat spray (claims 15, 32). However, the courts have held that changes in shape are a matter of choice, which a skilled artisan would have found obvious absent evidence of unexpected results.

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In the third aspect, Kittle differs from the claims in that he does not specifically teach that the motivating gas is carbon dioxide or nitrogen. However, it would have been obvious to one of ordinary skill in the art to have selected nitrogen or carbon dioxide as the gas because Kittle teaches that a gas is introduced into the emulsion and this generic teaching of a gas encompasses the gases of the present claims.

6. Claims 2 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kittle further in view of Pitchford (US 3,808,020).

Kittle fails to teach that the asphalt particles have an average diameter of about 5 microns or less. However, Pitchford teaches this difference (see col. 1, lines 14-18),

It would have been obvious to one of ordinary skill in the art to have selected asphalt particles having an average diameter of about 5 microns or less because Pitchford teaches as a general rule asphalt emulsions contain asphalt particles that have a particle size of less than 5 microns.

7. Claims 13 and 31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 13 and 31 are objected to because the prior art fails to teach or suggest that the aerosol of the spray has a particle size of about 100 microns to about 500 microns.


Claims 51-54 are allowable because the prior art fails to teach or suggest the process for spraying an asphalt emulsion onto coal wherein the water and soap mixture and the asphalt binder are introduced into a mixer along a common directional vector and said asphalt binder is progressively cooled in said mixer.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cephia D. Toomer whose telephone number is 703-308-2509. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 703-306-2777. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


Cephia D. Toomer
Primary Examiner
Art Unit 1714

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July 23, 2003